

PSOMAS



*Presentation to the*

**City of Beverly Hills**  
Public Works Commission

# 2015 Urban Water Management Plan

April 18, 2016

# BASIS OF PREPARING UWMP

- Water agency serving over 3,000 acre-feet of water annually or providing service to more than 3,000 customers is required to prepare UWMP in years ending in 5 and 0
- 2015 UWMP due to DWR by July 1, 2016
- Demonstrate adequate water supplies to meet existing and future demands
- Assess the reliability of the agency's water supplies over a 20-year planning horizon
- Report whether agency achieved 2015 conservation target in per capita use and if on track to achieve 2020 target as required in the Water Conservation Bill of 2009 (SBx7-7)

# CITY WATER SYSTEM

- City's WSA is 4,069 acres: City of Beverly Hills (3,646 acres) & portion City of West Hollywood (423 acres) (10.4 % of WSA)
- Current sources are imported water purchased from Metropolitan & groundwater from Hollywood Basin via four City wells
- Imported water supply is blend of SWP and the Colorado River water treated at Metropolitan's Weymouth Treatment Plant
- Groundwater treated at City's water treatment plant: 2-stage reverse osmosis treatment train
- City's water distribution system has 170 miles of water mains, 16 water service zones and 10 reservoirs (43.5 million gallons of storage)



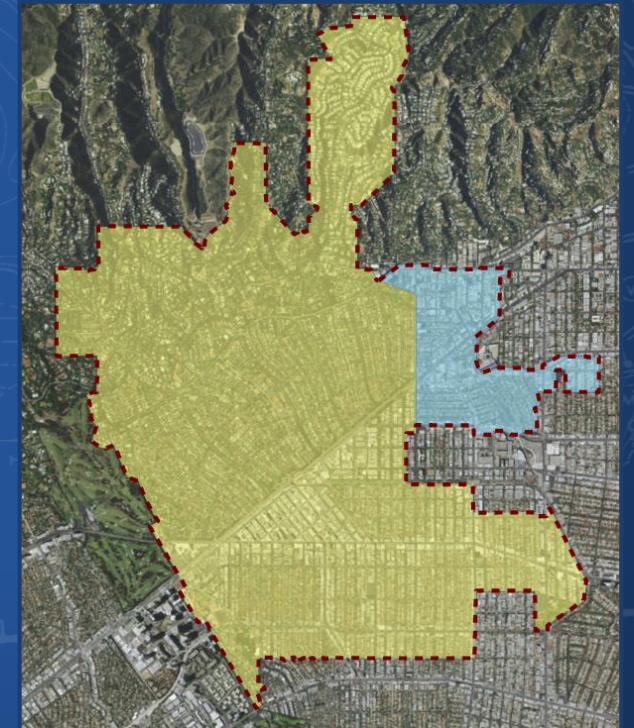
# CITY WSA DEMOGRAPHICS AND PLANNED GROWTH

- City WSA population estimated at 43,189 in 2015 with 19% of population in West Hollywood
- Based on SCAG projections, WSA population to increase 8.7% by 2040, with 16.7% increase projected for WSA in West Hollywood

Water Service Area (WSA) Current and Projected Population							
Service Area	2015	2020	2025	2030	2035	2040	Increase <sup>(a)</sup>
West Hollywood <sup>(b)</sup>	8,356	8,635	8,914	9,193	9,471	9,750	16.7%
Beverly Hills	34,833	35,306	35,780	36,253	36,727	37,200	6.8%
Total	43,189	43,942	44,694	45,446	46,198	46,950	8.7%

(a) Increase relative to 2015

(b) Approximately 23.5% of the City of West Hollywood's total population



# CITY WSA DEMOGRAPHICS AND PLANNED GROWTH

- Beverly Hills is built-out with some in-fill
- West Hollywood in WSA has number of large development projects planned including:
  - Melrose Triangle Project
  - Robertson Lane Hotel Project
  - Sunset-Doheny Hotel project
  - Palm Mixed Use Project
- Sufficient planned water supplies, including conservation to meet all projected demands for all scenarios overall
- However, water master plan or subarea master plans recommended to evaluate & size infrastructure for new developments
- Additionally, Water Supply Assessment, in accordance with Senate Bill 221 or 610, may be required

# CITY HISTORICAL & PROJECTED WATER USE

- Due to water conservation ordinances & measures, water use has decreased 6.9% since 2010 and 21.4% since 2005
- Water Loss has decreased from 9.6% in 2005 to 6.0% in 2015

**Historical City WSA Water Use and Water Loss**

	2005	2010	% Change (2005-2010)	2015	% Change (2010-2015)	% Change (2005-2015)
Water Use (AFY)	13,279	11,204	-15.6%	10,432	-6.9%	-21.4%
Per-Capita Demand (gpcd)	275.8	237.1	-14.1%	215.6	-9.1%	-21.8%
Water Supply (AFY)	13,279	11,204	-15.6%	10,432	-6.9%	-21.4%
Water Loss (AFY)	1,272	937	-26.3%	629	-32.9%	-50.6%
Water Loss %	9.6%	8.4%	-	6.0%	-	-



# CITY HISTORICAL & PROJECTED WATER USE

- Per-capita use dropped from 276 gpcd in 2005 to 216 gpcd in 2015
- Use projected to increase to 226 gpcd in 2020 (non-drought) then gradually decrease
- Water demand projected to increase 9.6% by 2040

Projected City WSA Water Demands						
	2015	2020	2025	2030	2035	2040
Per-Capita Water Use (gpcd)	215.6	225.6	223.3	221.2	219.2	217.3
Water Use (AFY)	10,431	11,104	11,182	11,262	11,344	11,428
% Increase Relative to 2015	-	6.5%	7.2%	8.0%	8.8%	9.6%

# CITY HISTORICAL & PROJECTED WATER USE

- Agency must report whether it achieved target in per-capita urban water use in 2015
- Show if on track to achieve 2020 target as required in the Water Conservation Bill of 2009 (SBx7-7)
- In 2015, City's per-capita water use of 215.6 gpcd was significantly lower than its 2015 target of 262.6 gpcd
- City per-capita water use has been lower than its 2015 target for past 7 years
- City's 2015 per-capita water use also is significantly lower than its 2020 target of 233.4 gpcd



# CITY WATER CONSERVATION

- Advanced Metering Infrastructure (AMI) (\$440,000) more accurate & able to locate water leaks
- Pipeline Replacement Program - 3.6 miles replaced from 2011 to 2015 to limit system water losses
- City uses tiered water rates with higher price tiers for higher water usage – Conservation Pricing
- In 2015, City spent \$737,000 on mailings, outreach materials & supplementing rebate programs to promote conservation
- City promotes drought tolerant landscaping classes & rebate programs related to turf removal & water efficient devices
- During FY15/16, City established and filled Conservation Administrator position to develop and manage conservation programs

# CITY WATER SUPPLY

- Current water supply sources are imported water from Metropolitan & groundwater from Hollywood Basin via four City wells
- Since 2004, approx. 90% of City water supply from Metropolitan & 10% from groundwater production
- Imported water has been reliable, however, drought has increased need for City to develop additional water supply reliability
- City has begun to implement new water supply projects as identified in City's Water Enterprise Plan prepared in July 2015. The Preliminary Design Report (PDR) phase for the La Brea Subarea wells was started in April 2016.

# CITY WATER SUPPLY (WEP RECOMMENDED PROJECTS)

## Groundwater Production from Central Basin

- Develop three new wells for 1,700 AFY net production
- Includes 23,000 feet of pipeline & expansion of treatment plant
- Preliminary Design Report (PDR) phase of project is underway

## Increased Groundwater Production from Hollywood Basin

- Develop two new shallow wells for 350 AFY net production
- Shallow groundwater wells currently under construction

## Potential Participation in Water Bank

- Dewatered aquifer stores water in wet years for use in dry years
- Potential to negotiate purchase & obtain water to supply bank



# WATER SUPPLY RELIABILITY ASSESSMENT

- Supply from State Water Project affected by Sacramento-San Joaquin River Delta ecosystem issues
- SWP delivery restrictions resulted in loss of 1.5 million acre feet of supplies to Metropolitan from 2008 through 2014
- California EcoRestore and WaterFix were developed in 2015 to restore the Delta ecosystem & ensure reliable SWP water supply
- Metropolitan estimated supply capability & projected demands through the year 2040 for average, single-dry, & multiple-dry year scenarios
- Metropolitan projected supply surplus in every forecast year through 2040 with current supplies (not including supplies under development)
- City demands estimated to increase 5% in dry years

Projected City Water Demands and Supplies						
Water Supply	Source Detail	Projected Water Supply				
		2020	2025	2030	2035	2040
		Volume	Volume	Volume	Volume	Volume
Projected Normal-Year Supplies						
Imported Water	Treated MWD	9,104	7,482	7,562	7,644	7,728
Groundwater	Hollywood Basin	2,000	2,000	2,000	2,000	2,000
Groundwater	LBSA of Central Basin	-	1,700	1,700	1,700	1,700
Total		11,104	11,182	11,262	11,344	11,428
Projected Single-Dry Year and Multiple-Dry Year Supplies						
Imported Water	Treated MWD	9,659	8,041	8,125	8,211	8,299
Groundwater	Hollywood Basin	2,000	2,000	2,000	2,000	2,000
Groundwater	LBSA of Central Basin	-	1,700	1,700	1,700	1,700
Total		11,659	11,741	11,825	11,911	11,999

## Next Steps – Public Hearing Noticing & Adoption

- Week of April 4, 2016 – Completed noticing to City of West Hollywood & other stakeholders
- Public Hearing Advertising Notice (Week of May 22 & May 29, 2016)
- Public Hearing on June 7, 2016
- Adopt UWMP & Submit to Department of Water Resources by July 1, 2016





PSOMAS

*has*  
**Answers!**